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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,005	06/24/2003	Jerry Laramore	47293.830001.US1	5735
26582	7590	09/17/2004	EXAMINER	
HOLLAND & HART, LLP 555 17TH STREET, SUITE 3200 DENVER, CO 80201			O MALLEY, KATHRYN S	
			ART UNIT	PAPER NUMBER
			3749	

DATE MAILED: 09/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/606,005

Applicant(s)

LARAMORE ET AL.

Examiner

Kathryn S. O'Malley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-15, and 17 is/are rejected.
- 7) ☒ Claim(s) 10, 11 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 6/23/04 have been fully considered but they are not persuasive.
2. Applicant argues that Thorman teaches away from devices such as those taught by Engstrom et al. and Zielinski. Examiner respectfully disagrees. Engstrom et al. and Zielinski teach elements such as plenums, diffusers, deflector caps, etc. as presently claimed and as stated in the Office Action of 3/22/04 and restated below. They do not, however, comprehensively define the fluidized bed environment in which they are used. Thorman is relied upon to teach that it would have been obvious to, and in fact had previously been attempted by, those of ordinary skill in the art to use plenums and air diffusers similar to those taught by Engstrom et al. and Zielinski in an air kettle for a fluidized bed in attempts to "overcome the problems of particle attrition and plate erosion." (See Thorman column 1, lines 31-50.) While it is agreed that Thorman refers to diffusers of this type as inferior to solving the problems that his own diffusers sought to solve, this does not make the combination unobvious. In re Gurly, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994).

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thorman in view of Engstrom et al.

3. Thorman teaches an air kettle 10 for a fluidized bed comprising plenum 70 and air distributors 54, 56, 58, 60, and 62. Note column 4, lines 3-11 and Figure 1.

Thorman does not teach a perforated diffuser with a cap. Engstrom et al. teaches a distributor plate for a fluidized bed similar to that taught by Thorman comprising plenum 14 and diffuser 413 with perforations 26 surrounded by cap 417. Note column 3, lines 23-44; column 4, lines 51-64; and Figures 1 and 6. As Engstrom et al. teaches that his diffuser and cap configuration leads to greater distribution of air in an airbed, it would have been obvious to one of ordinary skill in the art to modify the fluidized bed of Thorman with the diffuser and cap configuration of Engstrom et al.

4. Claims 9, 13-15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thorman as applied to claim 1 above and further in view of Zielinski.

5. Thorman does not teach a deflector cap that directs a portion of air to the bottom of the airbed and a portion of air to the top of the airbed. Zielinski teaches a nozzle for use in a fluidized bed similar to that taught by Thorman comprising plenum 2 and deflector cap 10 that directs a portion of air through passage 16 to the bottom of the bed and a portion of air through perforation 11 directed to the top of the bed. Note column 4, lines 16-46 and Figure 1 and 3. As Zielinski teaches that his deflector cap results in greater distribution of air in an airbed, it would have been obvious to one of ordinary skill in the art to modify the fluidized bed of Thorman with the deflector cap of Zielinski.

***Allowable Subject Matter***

Claims 10, 11, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

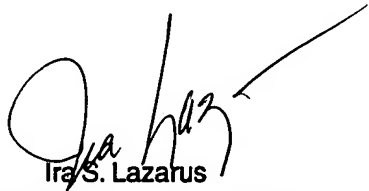
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathryn S. O'Malley whose telephone number is (703)308-2844. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on (703)308-1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KSO



Ira S. Lazarus  
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